

### quick facts on...

# Lower West Coast Water Supply Plan Update

**JUNE 2006** 

#### The South Florida Water Management District

is a regional, governmental agency that oversees the water resources in the southern half of the state. It is the oldest and largest of the state's five water management districts.

Our Mission is to manage and protect water resources of the region by balancing and improving water quality, flood control, natural systems, and water supply.



Lower West Coast Map

aintaining the quality of life in south Florida necessitates that we carefully plan ahead to meet future needs without sacrificing the environment. Water supply planning is an important part of that effort. In 2005, Florida lawmakers revised state water law and created the Water Resource Protection and Sustainability Program (Senate Bills 360 and 444), which strengthens the link between regional water supply plans and the potable water provisions in each local government's comprehensive plan. The legislation required that water management districts update regional plans by December 2006, tied to new local government comprehensive planning requirements, permitting incentives, and alternative water supply funding.

Public participation and input for updating the Lower West Coast (LWC) water supply plan has been coordinated through the District's Water Resources Advisory Commission, which serves as an advisory body to the Governing Board, and as a forum for sharing in decision making for water resource issues affecting South Florida.

Working closely with the South Florida Water Management District, local governments and water suppliers have played a key role in identifying the water supply projects that will be incorporated into their own, local comprehensive plans.

## Population and Water Use Trends

The population of the Lower West Coast planning area is projected to increase by over 750,000 residents in the next 20 years (2005-2025). Collier and Lee Counties will experience the largest share of this growth. The increased population will result in a 32% increase in water demand, much of it to meet public water supply and power generation needs. The District's projection show that 197 MGD in new water supplies will be required to meet the planning area needs through 2025. Twenty-year demand increases projected for the six major use categories are shown below:

| Total  | 197 MGD |
|--|---------|
| • Commercial / Industrial                          | 2 MGD   |
| • Domestic Self Supply<br>(private domestic wells) | 7 MGD   |
| • Recreational                                     | 7 MGD   |
| Agriculture  | 17 MGD  |
| • Electric Power Generation (cooling water, etc)   | 67 MGD  |
| • Public Water Supply                              | 97 MGD  |

For comprehensive information about regional water supply plans go to:

http://www.sfwmd.gov/org/ wsd/wsp/lwcwsp.htm

Florida's Water

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### **Lower West Coast Water Resources**

Fresh water for urban and agricultural use in the LWC planning area comes from surface water and two major aquifer systems: the Surficial Aquifer System, and the Intermediate Aquifer System. The Caloosahatchee River (C-43) is a major water source for agricultural uses in the canal basin and for one public water supply system. The Floridian Aquifer provides brackish water for desalination and use by municipalities, as well as for blending with other supplies such as surface water to meet irrigation needs.

It was recognized over a decade ago that the area was approaching the safe supply limits for traditional sources, including fresh groundwater and surfaces waters. As a result, the primary new supplies for public water systems in the Lower West Coast are being developed from alternative water sources. Water users and suppliers must continue to look to alternative supplies, such as brackish water, reclaimed water, and the capture and storage of seasonal surface water to meet the majority of new water supply needs.

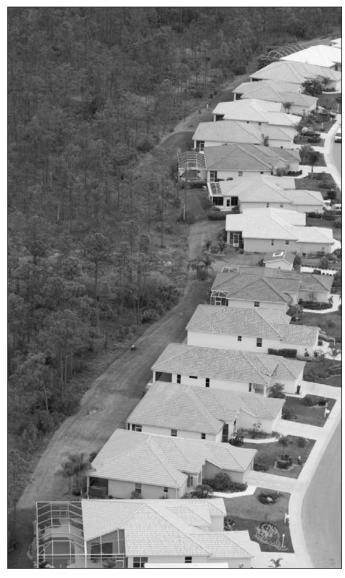
### Water Resource and Water Supply Development Projects

Florida water law identifies two types of projects to meet water needs: Water Resource Development projects and Water Supply Development projects. Water Resource Development projects are generally the responsibility of a water management district and are intended to assure the availability of an adequate supply of water for all competing uses deemed reasonable and beneficial and to maintain the functions of natural systems.

Local governments, government-owned and privately owned utilities, regional water supply authorities, multi-jurisdictional water supply entities, self-suppliers, and other water users are primarily responsible for Water Supply Development projects. For the LWC plan update, eleven traditional supply projects were submitted by local utilities. These projects have the collective potential to provide up to 2.5 MGD in new supply. Also, 82 alternative water supply projects were submitted, which include the following:

- Brackish Water: 41 projects yielding a potential 231 MGD
- Reclaimed Water: 55 projects with a total construction capacity of 307 MGD
- Aquifer Storage & Recovery: 13 projects with a total dry-season capacity of 32 MGD
- Surface Water: 8 projects with a total design capacity of 7.5 MGD

Net water demand for all users in the Lower West Cost is projected to increase from approximately 624 MGD to 821 MGD between 2005 and 2025. Water to serve increased urban demand is expected to be developed from alternative supplies. Agriculture, the largest water user in the LWC planning area, must continue to improve irrigation practices to conserve water, and where feasible, use alternative supplies such as blended sources and tailwater/stormwater recovery systems.



West Coast, North Fort Myers Development



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#### **SERVICE CENTERS**

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